

StorageTekTM HSC/VTCS Software

MVC Media Update Guide

August 2009

Versions 6.1/6.2/7.0

Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

U.S. Government Rights - Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

Sun, Sun Microsystems, the Sun logo and Sun Storage Tek are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries

UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Products covered by and information contained in this service manual are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, Etats-Unis. Tous droits réservés.

Sun, Sun Microsystems, le logo Sun et Sun StorageTek sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays.

UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exlusivement par X/Open Company, Ltd.

see above Les produits qui font l'objet de ce manuel d'entretien et les informations qu'il contient sont regis par la legislation americaine en matiere de controle des exportations et peuvent etre soumis au droit d'autres pays dans le domaine des exportations et importations. Les utilisations finales, ou utilisateurs finaux, pour des armes nucleaires, des missiles, des armes biologiques et chimiques ou du nucleaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou reexportations vers des pays sous embargo des Etats-Unis, ou vers des entites figurant sur les listes d'exclusion d'exportation americaines, y compris, mais de maniere non exclusive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une facon directe ou indirecte, aux exportations des produits ou des services qui sont regi par la legislation americaine en matiere de controle des exportations et la liste de ressortissants specifiquement designes, sont rigoureusement interdites.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFACON.





•

Preface

Audience

This guide is for StorageTek or customer personnel who are responsible for installing and configuring transports and accompanying media behind VSM.

Note – T9840D support requires the following PTFs:

- NCS/VTCS 6.1- L1H14EN (SOS6100), L1H13ZO (SWS6100), and L1A00OZ (SMC6100).
- NCS/VTCS 6.2- L1H14EP (SOS6200), L1H13ZC (SWS6200), and L1A00P0 (SMC6200).

T10000B support requires the following PTFs:

- NCS/VTCS 6.1 L1H142B (SOS6100) and L1H1429 (SWS6100)
- NCS/VTCS 6.2 L1H142E (SOS6200) and L1H142C (SWS6200)

iii

MVC Media Considerations

VTCS Considerations to Correctly Specify MVC Media

TABLE 1-1 describes the values required to specify the desired media and recording technique on the HSC VOLPARM/POOLARM statements and HSC STORCLAS statement to correctly specify the desired MVC media.

TABLE 1-1 RTD Model/MVC Media Values

Transport Model	TAPEREQ/ VOLPARM MEDIA	RECTECH	STORCLAS MEDIA	Cartridge Type - Specified by STORCLAS MEDIA	Density	Encrypted?
4490	STANDARD	STANDARD	STANDARD	standard length 3480 cartridge	single	N/A
9490, 9490EE	ECART	ECART	ECART	3490E cartridge	single	N/A
9490EE	ZCART	ZCART	ZCART	3490EE cartridge	single	N/A
9840	STK1R	STK1RA	STK1RAB	T9840A or T9840B cartridge	single	N/A
T9840B		STK1RB	STK1RAB	T9840A or T9840B cartridge	single	N/A
T9840C		STK1RC	STK1RC	T9840C cartridge	double	N/A
T9840D - T9840D Non- Encrypting Transport		STK1RD	STK1RD	T9840D cartridge	triple	no
T9840DE - T9840D Encrypting Transport		STK1RDE	STK1RDE	T9840D cartridge for encryption	triple	yes
T9940A	STK2P	STK2PA	STK2PA	T9940A cartridge	single	N/A
T9940B		STK2PB	STK2PB	T9940B cartridge	double	N/A

 TABLE 1-1
 RTD Model/MVC Media Values

Transport Model	TAPEREQ/ VOLPARM MEDIA	RECTECH	STORCLAS MEDIA	Cartridge Type - Specified by STORCLAS MEDIA	Density	Encrypted?
T1A34 - T10000A Non- Encrypting Transport	T10000T1	T1A34	T1A000T1	T10000 full capacity cartridge	single	no
T1AE34 - T10000A Encrypting Transport		T1AE34	T1A000E1	T10000 full capacity cartridge for encryption	single	yes
T1A34 - T10000A Non- Encrypting Transport	T10000TS	T1A34	T1A000TS	T10000 sport cartridge	single	no
T1AE34 - T10000A Encrypting Transport		T1AE34	T1A000ES	T10000 sport cartridge for encryption	single	yes
T1B34 - T10000B Non- Encrypting Transport	T10000T1	T1B34	T1B000T1	T10000 full capacity cartridge	double	no
T1BE34 - T10000B Encrypting Transport		T1BE34	T1B000E1	T10000 full capacity cartridge for encryption	double	yes
T1B34 - T10000B Non- Encrypting Transport	T10000TS	T1B34	T1B000TS	T10000 sport cartridge	double	no
T1BE34 - T10000B Encrypting Transport		T1BE34	T1B000ES	T10000 sport cartridge for encryption	double	yes

• Chapter 1 3

Use TABLE 1-1 on page 2 as a guideline to:

- Create VOLATTR statements that segregate single/double density media or encrypted/non-encrypted media.
- Specify the correct STORCLAS MEDIA values to assign the desired cartridge type and recording technique to MVCs.
- Determine which transport models can write to/read from which media. A higher capability transport (double density vs. single, or encryption vs. non-encryption) can read from media written by a lower capability transport, but can only write to that media from the beginning of the tape. A lower capability transport, however, cannot read from media written by a higher capability transport but can write to that media from the beginning of the tape.

Examples

■ If you are adding T1000B encrypting transports and new media to encrypt, create VOLATTRs for the new media and STORCLAS statements to allow VTCS to select this media. For example:

```
VOLATTR VOLSER(MVC500-MVC599) MEDIA(TIB000T1) RECTECH(TIBE34) STORCLAS NAME(BENCRYPT) MEDIA(T1B000ES)
```

■ If you are adding T10000B encrypting transports and want to convert existing media to encryption media, change existing VOLATTRs to specify encryption and change existing STORCLAS statements to request encryption. For example:

```
VOLATTR VOLSER(MVC200-MVC299) MEDIA(TI000T1) RECTECH(TIBE34) STORCLAS NAME(T10K) MEDIA(T1B000ES)
```

Here's how it works: If I have MVCs that already contain data, I cannot add "encrypted" VTVs to these MVCs. I can, however, encrypt data on initialized MVCs that do not contain data. To make this strategy work, therefore, ensure that you have sufficient free T10000 MVCs and also consider doing demand drains on MVCs that do contain data to free them up.

Additional Information

Sun Microsystems, Inc. (Sun) offers several methods for you to obtain additional information.

Sun's External Web Site

Sun's external Web site provides marketing, product, event, corporate, and service information. The external Web site is accessible to anyone with a Web browser and an Internet connection.

The URL for the Sun external Web site is: http://www.sun.com

The URL for Sun StorageTekTM brand-specific information is: http://www.sun.com/storagetek

Sun Microsystems Documentation

The Sun Microsystems Documentation Web Page provides customer documentation in softcopy format, including publications formerly found on the StorageTek product Customer Resource Center (CRC). The URL for the Sun Microsystems Documentation Web Page is:

http://docs.sun.com/app/docs

Sun Global Partners

The Sun Global Partners site provides information about solutions available with Sun's partners:

http://www.sun.com/third-party/global/

• 5

Third-Party Web Sites

Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused by or in connection with the use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

Sun's Worldwide Offices

You may contact any of Sun's worldwide offices to discuss complete storage, service, and support solutions for your organization. You can find address and telephone number information on 's external Web site at:

http://www.sun.com/worldwide/

Customer Support

For more information about Sun support (including for StorageTek branded products) see: http://www.sun.com/support/

Customer-initiated Maintenance

Customer-initiated maintenance begins with a telephone call from you to Sun Microsystems StorageTek Support. You receive immediate attention from qualified personnel, who record problem information and respond with the appropriate level of support.

To contact Sun Microsystems StorageTek Support about a problem:

1. Use the telephone and call:

% **800.872.4786** (1.800.USA.4Sun)

% 800.722.4786 (Canada)

For international locations, go to

http://www.sun.com/service/contacting/solution.html

for the appropriate telephone number

2. Describe the problem to the call taker. The call taker will ask several questions and will either route your call to or dispatch a support representative.

If you have the following information when you place a service call, the process will be much easier:

Account name	
Site location number	
Contact name	
Telephone number	
Equipment model number	
Device address	
Device serial number (if known)	
Urgency of problem	
Fault Symptom Code (FSC)	
Problem description	

Appendix A 7

Conventions for Reader Usability

Conventions are used to shorten and clarify explanations and examples within this book.

Typographic

The following typographical conventions are used in this book:

- **Bold** is used to introduce new or unfamiliar terminology.
- Letter Gothic is used to indicate command names, filenames, and literal output by the computer.
- Letter Gothic Bold is used to indicate literal input to the computer.
- Letter Gothic Italic is used to indicate that you must substitute the actual value for a command parameter. In the following example, you would substitute your name for the "username" parameter.
- Logon username
- A bar (|) is used to separate alternative parameter values. In the example shown below either username or systemname must be entered.
- Logon username|systemname
- Brackets [] are used to indicate that a command parameter is optional.
- Ellipses (...) are used to indicate that a command may be repeated multiple times.
- The use of mixed upper and lower case characters (for non-case sensitive commands) indicates that lower case letters may be omitted to form abbreviations. For example, you may simply enter **Q** when executing the **Quit** command.

Keys

Single keystrokes are represented by double brackets [[]] surrounding the key name. For example, press [[ESC]] indicates that you should press only the escape key.

Combined keystrokes use double brackets and the plus sign (+). The double brackets surround the key names and the plus sign is used to add the second keystroke. For example, press [[AL]] + [[C]] indicates that you should press the alternate key and the C key simultaneously.

Enter Command

The instruction to "press the [[ENTER]] key" is omitted from most examples, definitions, and explanations in this book.

For example, if the instructions asked you to "enter" **Logon pat**, you would type in **Logon pat** and press [[ENTER]].

However, if the instructions asked you to "type" **Logon pat**, you would type in **Logon pat** and you would *not* press [[ENTER]].

Warnings, Cautions, and Notes

The following are used in this book.

Caution – Information necessary to keep you from corrupting your data.

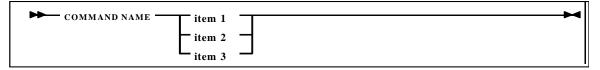
Tip – Information that can be used to shorten or simplify your task or they may simply be used as a reminder.

Note – Information that may be of special interest to you. Notes are also used to point out exceptions to rules or procedures.

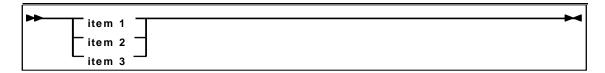
Syntax

Syntax flow diagram conventions include the following:

Flow Lines—Syntax diagrams consist of a horizontal baseline, horizontal and vertical branch lines and the command text. Diagrams are read left to right and top to bottom. Arrows show flow and direction.

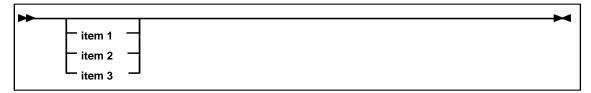


Single Required Choice—Branch lines (without repeat arrows) indicate that a single choice must be made. If one of the items to choose from is on the baseline of the diagram, one item must be selected.

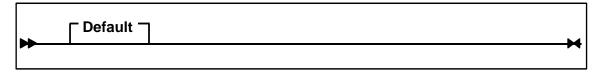


• Appendix A 9

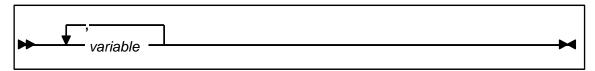
Single Optional Choice—If the first item is on the line below the baseline, one item may optionally be selected.



Defaults—Default values and parameters appear above the baseline.



Repeat Symbol—A repeat symbol indicates that more than one choice can be made or that a single choice can be made more than once. The repeat symbol shown in the following example indicates that a comma is required as the repeat separator.



Keywords—All command keywords are shown in all upper case or in mixed case. When commands are not case sensitive, mixed case implies that the lowercase letters may be omitted to form an abbreviation.

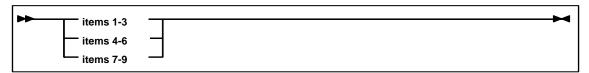
Variables—Italic type is used to indicate a variable.

Alternatives—A bar (|) is used to separate alternative parameter values.

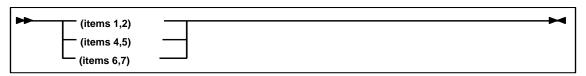
Optional—Brackets [] are used to indicate that a command parameter is optional.

Delimiters—If a comma (,), a semicolon (;), or other delimiter is shown with an element of the syntax diagram, it must be entered as part of the statement or command.

Ranges—An inclusive range is indicated by a pair of elements of the same length and data type, joined by a dash. The first element must be strictly less than the second element.



Lists—A list consists of one or more elements. If more than one element is specified, the elements must be separated by a comma or a blank and the entire line must be enclosed by parentheses.



Appendix A 11

